

CLAIMS

1. (currently amended) Method of printing on a press,
providing a printing run length of said press to be
increased with a factor of at least 5 versus a reference
run length, making use therefore of a lithographic printing
plate, said method comprising the steps of:
- image-wise exposing to infrared light a heat sensitive
imaging element, said element being optionally present on
the press before starting said image-wise exposing step to
infrared light, wherein said element comprises, on a
lithographic base with a hydrophilic surface thereupon, an
image-forming layer including hydrophobic thermoplastic
polymer particles and a hydrophilic polymer binder, and,
optionally, an infrared absorbing compound, wherein said
hydrophobic polymer particles contain more than 0.1 wt % of
nitrogen and have an average particle size diameter in the
range from 0.015 to 0.15 μm , and wherein said reference run
length utilizes reference particles containing no or less
than 0.1 wt % of nitrogen,
 - developing the image-wise exposed imaging element by
mounting it on a print cylinder of a printing press and

applying an aqueous dampening liquid and ink to said imaging element while rotating said print cylinder, starting printing up to said increased run length.

2.(previously presented) Method according to claim 1, wherein said hydrophobic polymer particles contain structural chemical groups selected from the group consisting of amide, urethane, methacrylonitrile, crotonitrile, vinylidene cyanide, isocytosine, pyrrolidone, piperazine, cyanomethyl, cyanoethyl, cyanopropyl, cyanoaryl, cyanoacrylate, primary amines, mono- or di- n-alkyl substituted amines, urea, imide, imine, triazine, sulfonamide, onium, melamine, pyrimidine, ureido-pyrimidone, pyridine, barbiturate, isocyanurate or imidazole.

3.(previously presented) Method according to claim 1, wherein said hydrophilic polymer binder is a water-soluble, water-dispersable, alkali-dispersable or alkali-soluble polymer.

4. (previously presented) Method according to claim 1, wherein
the hydrophobic thermoplastic polymer particles consist of
a copolymer of monomers selected from the group consisting
of styrene, tert.-butylstyrene, methylmethacrylate,
peramethylstyrene, methacrylonitrile, N-alkyl substituted
acrylamides, N-alkyl substituted methacrylamides and
maleimides.
5. (previously presented) Method according to claim 1, wherein
the hydrophobic thermoplastic polymer particles are present
in the image forming layer in an amount of at least 50 wt%.
6. (previously presented) Method according to claim 1, further
comprising a second hydrophilic polymer binder in a layer
adjacent to said image forming layer.
7. (previously presented) Method according to claim 1, wherein
the infrared absorbing compound is an anionic infrared
cyanine dye absorbing infrared radiation in the wavelength
range from 800 to 1100 nm and wherein the infrared

absorbing compound is present in said image forming layer or in a layer adjacent thereto.

8. (previously presented) Method according to claim 1, wherein the hydrophilic surface is a lithographic surface, present on a metal support, being a plate or a print cylinder.

9. (Canceled)

10. (Canceled)

11. (Canceled)

12. (currently amended) Method of printing on a press, said method comprising the steps of:
image-wise exposing to infrared light a heat sensitive lithographic printing plate, wherein said lithographic printing plate comprises:
a lithographic base with a hydrophilic surface thereupon, an image-forming layer including hydrophobic thermoplastic polymer particles and a hydrophilic polymer binder, and, an infrared absorbing compound, wherein said hydrophobic polymer particles contain more than 0.1 wt % of

nitrogen and have an average particle size diameter in the range from 0.015 to 0.15 μm , developing the image-wise exposed printing plate by mounting it on a print cylinder of a printing press and applying an aqueous dampening liquid and ink to said imaging element while rotating said print cylinder, and printing.

13. (previously presented) The method of claim 12 wherein said lithographic printing plate is present on said press prior to said image-wise exposing.

14. (canceled)

15. (canceled)

16. (currently amended) Method of printing on a press, said method comprising the steps of:

image-wise exposing to infrared light a heat sensitive lithographic printing plate, wherein said lithographic printing plate comprises:

a lithographic base with a hydrophilic surface thereupon, an image-forming layer including hydrophobic thermoplastic polymer particles and a hydrophilic polymer binder, and, an infrared absorbing compound, wherein said hydrophobic polymer particles contain more than 0.1 wt % of nitrogen and have an average particle size diameter in the range from 0.015 to 0.15 μm ,

developing the image-wise exposed imaging element by mounting it on a print cylinder of a printing press and applying an aqueous dampening liquid and ink to said imaging element while rotating said print cylinder, and

printing;

with the proviso that said printing is at least 5 times longer than printing when said hydrophobic polymer particles contain less than 0.1 wt% nitrogen and have an average particle diameter more than 0.15 μm wherein said

lithographic printing plate is present on said press prior to said image-wise exposing.

17. (canceled)